

# C801 4G Router

## User Guide



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# Introduction

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The following topics describe the basics of using this guide and your new broadband device.

## Before You Begin

Thank you for purchasing your new C801 4G Router!

The following topics explain how best to use this guide to get the most out of your broadband device.

## Before Using Your Device

Read **Safety and Notices** thoroughly for proper usage.

Accessible services may be limited by subscription contract conditions.

## Guide Usage Notes

Note that most descriptions in this guide are based on your device's default settings at the time of purchase.

## Screenshots and Key Labels

Screenshots and Key labels are provided for reference only. Actual windows, menus, etc. may differ in appearance.

## Other Notations

In the user guide, the broadband device may be referred to either as "C801," "router," or "device".

## Compatible Operating Systems (OS)

The table below outlines the compatible operating systems (OS) for your device. Use outside these environments may affect performance. Additional factors (hardware, connected peripherals, installed applications, etc.) may also affect performance.

- For computer support, OS version upgrade information, etc., see the corresponding manufacturer's product support documentation.
- The information for operating system (compatible OS) listed below is the current information for your device sold as of Jan.2017.

| Item                                     | Description          |
|--|----------------------|
| <b>Compatible operating systems (OS)</b> | Windows 7, 8, 10     |
|  | MacOS 10.5 or later  |
|  | Android 2.1 or later |

| Item                       | Description   |
|----------------------------|---|
| <b>Compatible browsers</b> | Chrome 36.0 or later<br>Internet Explorer 8.0 or later<br>Firefox 3.1 or later<br>Safari 5.0 or later |

### **Package Contents**

See below for details on everything you will find in the box for your C801.

- C801 4G Router
- A pair of external antennas
- AC Adapter
- Get Started Guide
- Important Information Booklet

### **Additional Information**

The following list describes additional information before you begin using your C801.

- Your broadband device accommodates software updates. Always use the latest software.
- Note that connection speeds may drop or connections may be disabled depending on line traffic or connection environments.

# Get Started

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The following topics give you all the information you need to set up your device and wireless service for the first time.

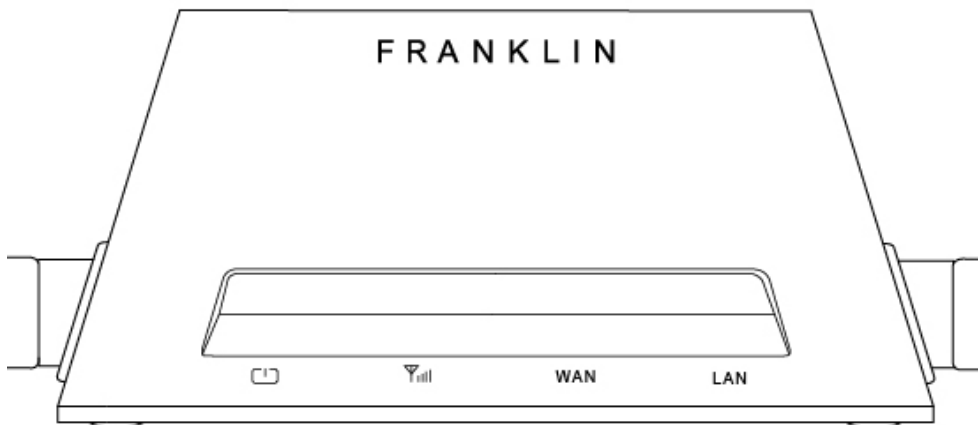
## Parts and Functions

Learn your device's primary parts and functions.

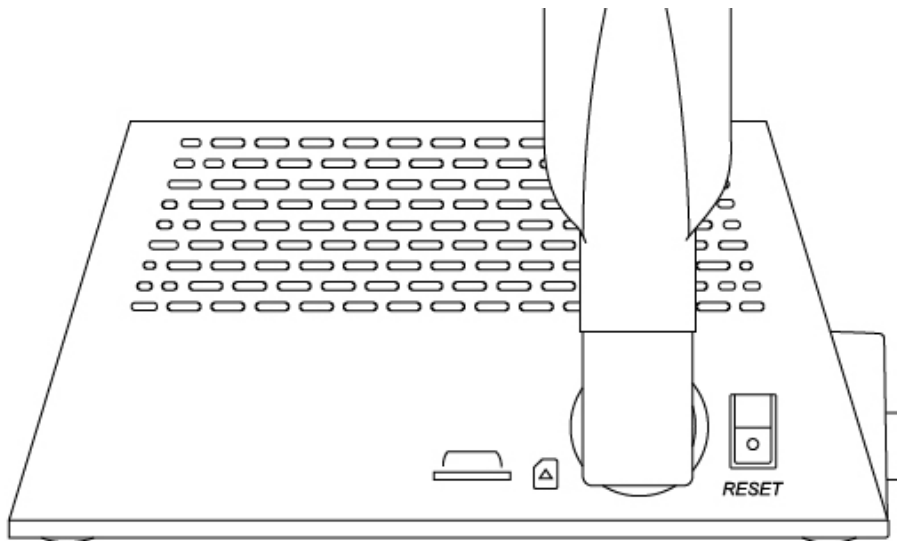
## Device Layout

The following illustration outlines your device's primary external features and buttons.

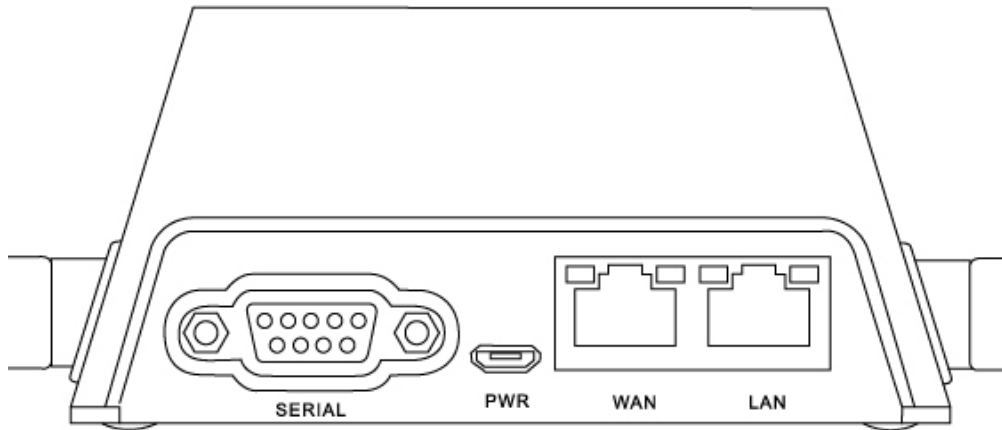
### Frontal View



### Side View





## Rear View



| Part                             | Description  |
|----------------------------------|--|
| <b>SIM card slot</b>             | Install the SIM card.  |
| <b>Micro USB port</b>            | Power on device by plugging in micro USB to device and AC adapter end to power outlet  |
| <b>Reset button</b>              | Located on the side of device. Press and hold until all lights blink to factory reset your device. (Device must be On when pressing reset button.) |
| <b>External antennas</b>         | Attach provided antennas to the sides of device for optimal speeds.  |
| <b>Serial port</b>               | Connect the serial cable to utilize the Out of Band Feature.   |
| <b>LAN port (PoE Compatible)</b> | Connect one end of ethernet cable here and other end to desired device depending on your network.  |
| <b>WAN port (PoE Compatible)</b> | Connect one end of ethernet cable here and other end to desired device depending on your network.  |
| <b>LED Light Indicators</b>      | Indicates the status and activity of your router.  |

## LED Light Indicators

The LED Light Indicators on the front of the device will show the status of C801's power, signal strength, WAN activity, and LAN activity.

| Icon  | Description   |
|---|---|
|  | Green : Power On  |
|   | No Light : Power Off                                      |
|  | Red : No service  |
|   | Yellow : Moderate Service Area                            |
|   | Green : Good Service Area                                 |
| WAN   | Green (Solid) : WAN connected. No data transmission.      |
|   | Green (Blink) : WAN connected. Data is being transferred. |
|   | No Light : WAN not connected                              |
| LAN   | Green : LAN connected                                     |
|   | No Light : LAN not connected                              |

## Data Transfer Volume and Transfer Speed

| Wireless Mode | Maximum Downlink Speed | Typical Downlink Speed |
|---------------|------------------------|------------------------|
| 4G/LTE        | 150 Mbps               | 50 Mbps                |

Note: Actual speeds depend on several factors, including network conditions.

## SIM Card

The SIM card is an IC card containing your device's phone number and other customer information.

Note: Your device's SIM card is preinstalled.

## Handling a SIM Card

Keep the following in mind when handling a SIM card.

- Customer is responsible for any damage caused by inserting the SIM card in another-brand IC card reader, etc. The company is not responsible in such case.
- Always keep the IC chip clean.
- Wipe clean with a dry, soft cloth.
- Avoid applying labels. May damage the SIM card.



- See instructions included with the SIM card for handling.
- The SIM card is the property of the company.
- The SIM card is replaceable (at cost) in case of loss/damage.
- Return the SIM card to the company when cancelling subscription.
- Returned SIM cards are recycled for environmental purposes.
- Note that SIM card specifications and performance may change without notice.
- It is recommended that you keep a separate copy of information that is stored on the SIM card. The company is not responsible for damages from stored information that is lost.
- Always follow emergency procedures to suspend service if your SIM card or device (SIM card inserted) is lost or stolen. For details, contact Customer Service.
- Always power off the broadband device before inserting or removing the SIM card.

# Device Setup

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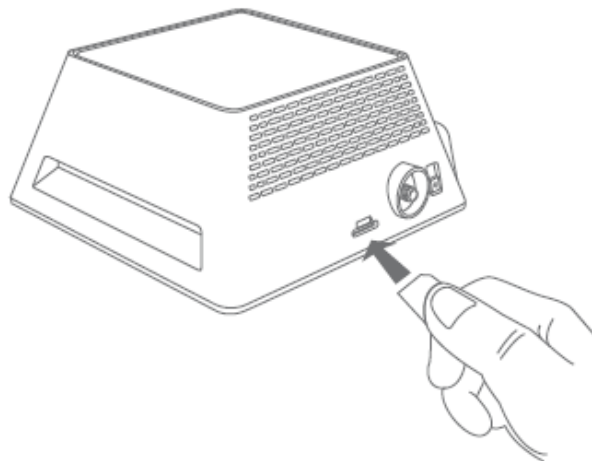
The following topics outline basic features and operations of your device.

## **Install and Remove the SIM card**

Locate the SIM slot which is on the right side of the device and follow the steps below:

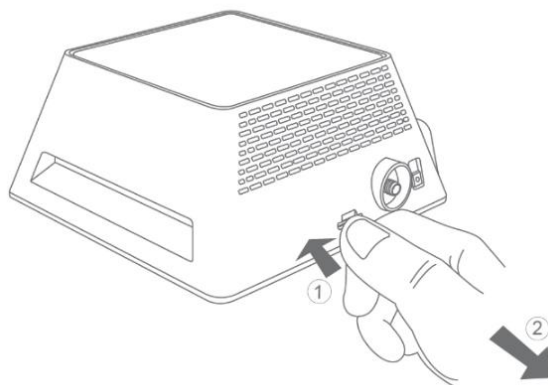
### **1) Install the SIM card**

- a) Insert SIM card into SIM slot, notch end first and gold contacts facing down. (Refer to engraving next to the SIM slot)
- b) Gently insert the SIM into the slot until you hear a click.



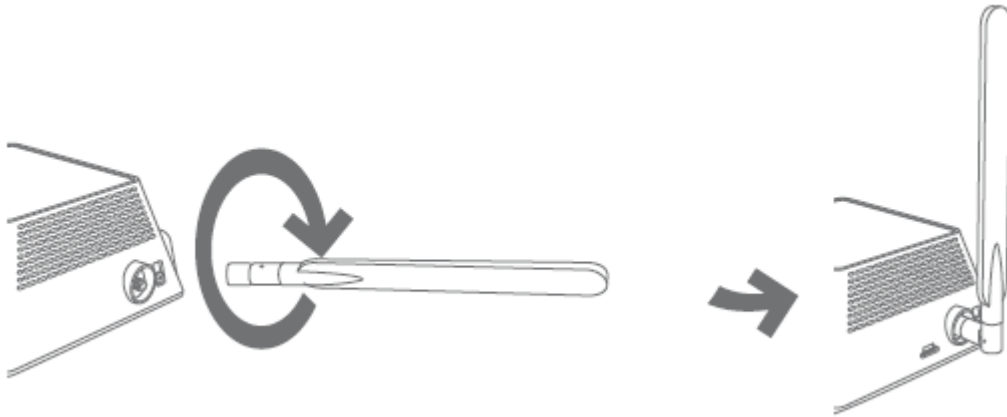
### **2) Remove the SIM card**

- a) Gently push the SIM card until you hear a click.
- b) The SIM card will now be sticking out



## Attach Antennas

- a) Align the antennas with the antenna posts which are located on the sides of the device.
- b) Twist the antennas on and make sure they are secure.
- c) You may carefully adjust the antenna to improve signal.

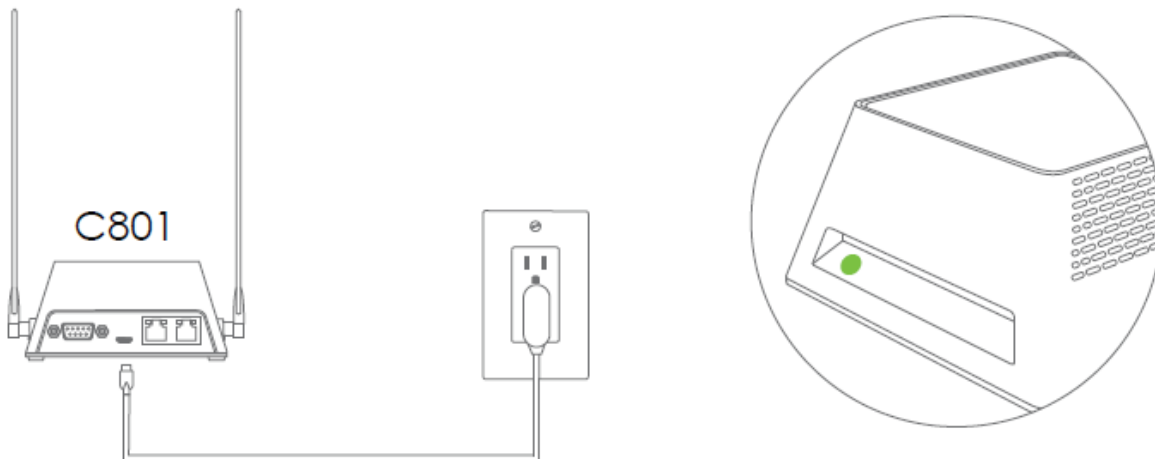


## Power Device On or Off

### 1) Power your device on

#### Option 1: Using the included AC Adapter

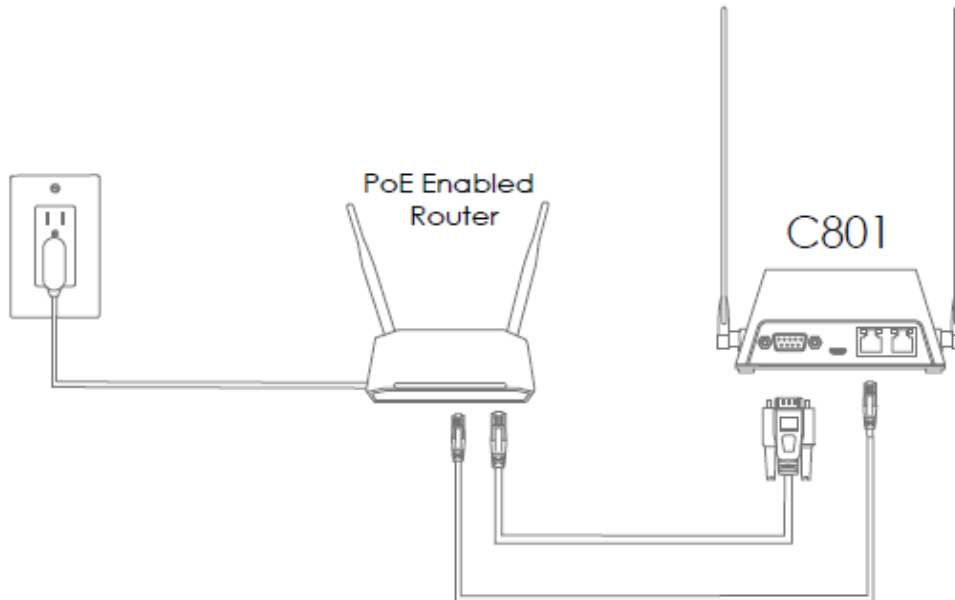
Plug in the AC Adapter to the power outlet and plug the micro USB end to the C801's micro USB port, which is located at the back of the device. Once connected, a green light will appear above the power icon.



## Option 2: Use a PoE (Power over Ethernet) connection

Note: The C801 can be powered through Ethernet cable connected to a PoE power source such as PoE injector, PoE enabled router etc.. When powered through Ethernet cable, you don't need to connect the AC adapter to C801.

Connect PoE powered Ethernet cable to either WAN or LAN port as needed for your network. Once powered On, a green light will appear above the power icon on the device. C801 will be powered on.



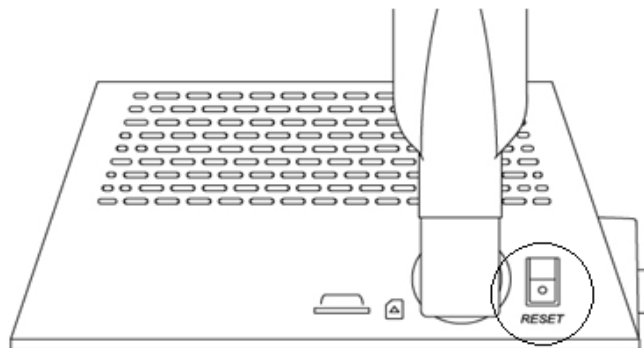
## 2) Power your device off

Your device will power off once AC adaptor or PoE connection is unplugged.

## Restart Your Device

If you are experiencing problems with your device, try restarting your device.

Note: If you are still experiencing problems, locate the Reset button on the side of the device. Press and hold while device is On until the front LED lights start blinking to Factory Reset the device.



# Wiring your C801

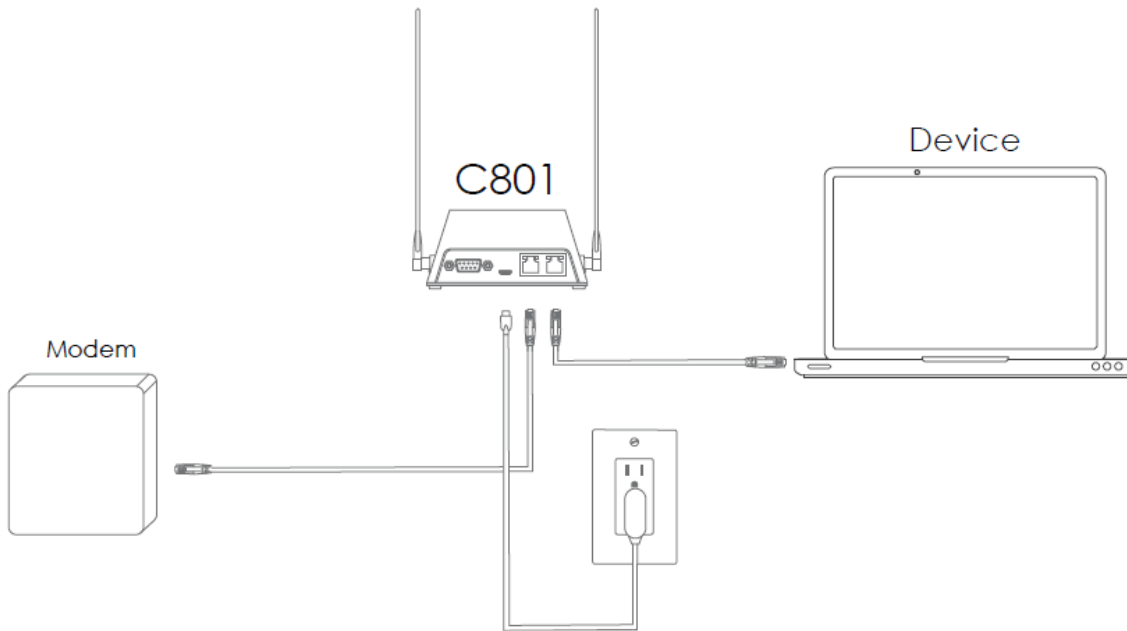
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Note: Options below are setup instructions for basic use cases. Depending on desired use case or user's current network setup, setup may differ from options below.

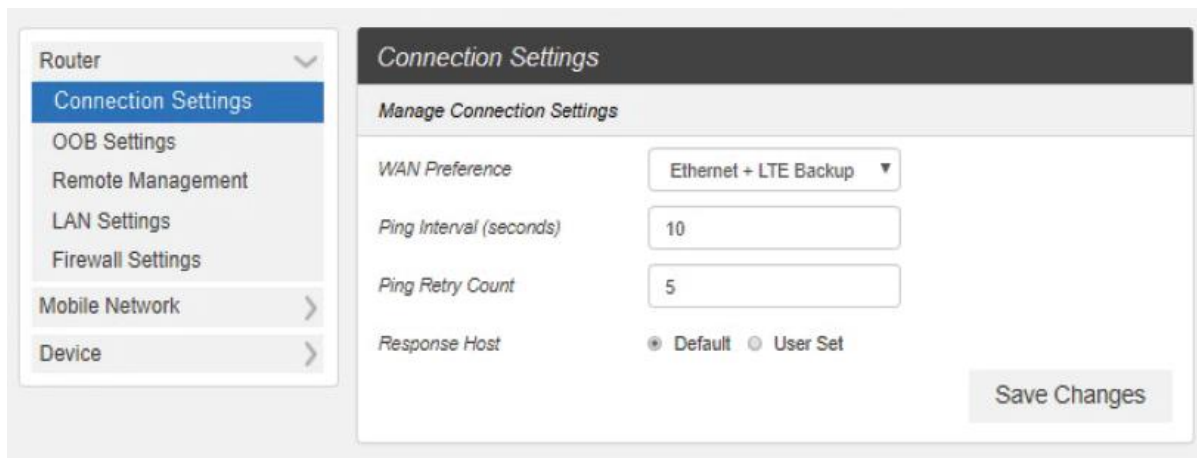
## Wiring your device

### Option 1: Using your C801 as failover backup

Note: Ethernet cables are not included.



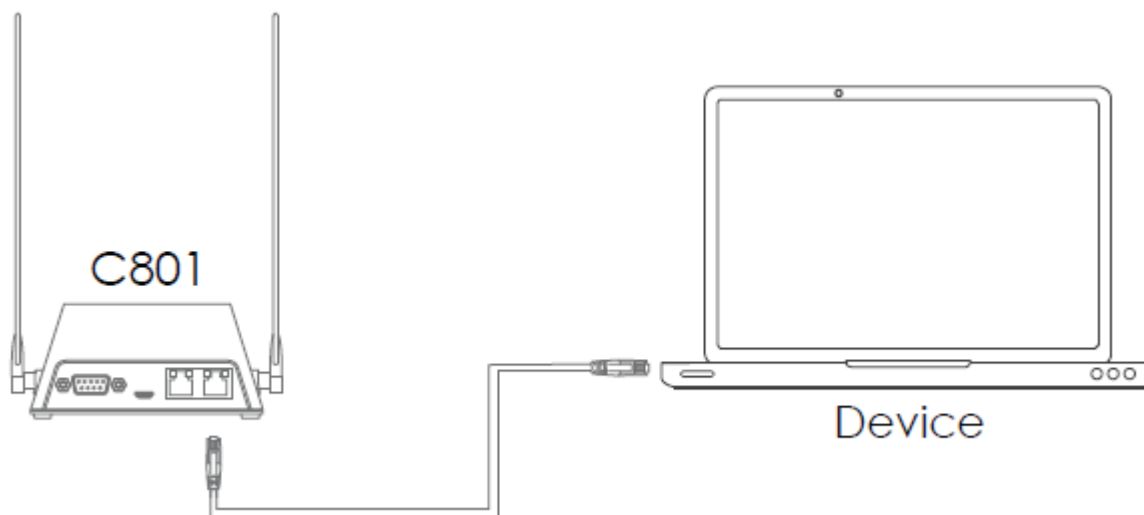
- a) Connect one end of the ethernet cable to the LAN port of your Modem that provides a connection to the internet.
- b) Then connect the other end to the WAN port of the C801.
- c) Using another Ethernet cable, connect one end of the cable to the LAN port of the C801, and connect the other end of the cable to device requiring failover backup.
- d) Next, access the Web UI, Log in and click the **Settings Tab**. (See Settings in this guide for access to [Web UI](#) and **Admin Log In** which is under Settings for Log in information.)
- e) While in **Settings**, click **Connection settings** menu on the left in **the Router** menu pane.
- f) Then set the **WAN Preference** to **Ethernet+LTE Backup** and click Save Changes.



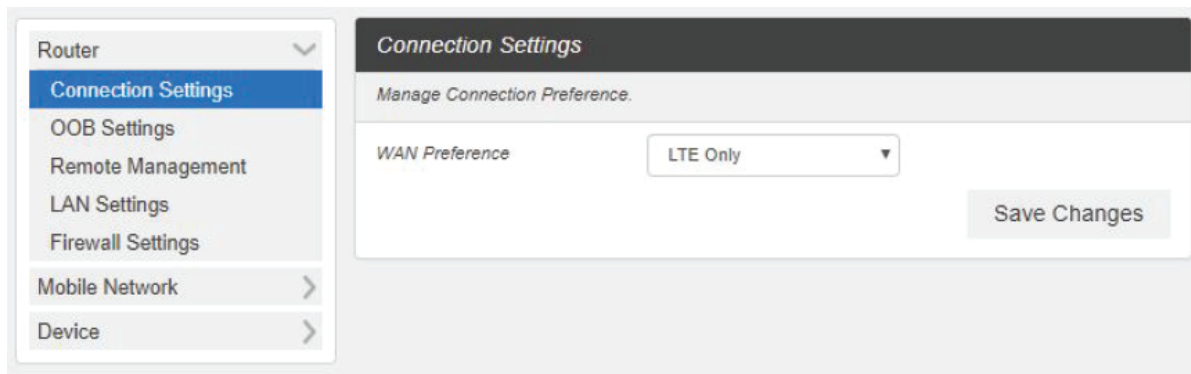
## Option 2: Using your C801 as main connection to internet

Note: Ethernet cables are not included.

- a) Connect one end of the ethernet cable to C801's LAN port.
- b) Then connect the other end to device requiring internet connection.



c) Next, access the Router Manager, Log in and click the Settings Tab. (See Settings in this guide for access to Web UI and Admin Log In which is under Settings for Log in information.)



# Settings

The following topics provide an overview of items you can change using the device **setting** menu accessed through the Web UI.

## Web UI Overview

Use the device Web UI in a browser to check or change your C801 settings from a device connected via Wi-Fi.

## Web UI Window

Explore the options available through the device's Web UI window.

1. Connect your C801 to an external device via a LAN connection.
2. Launch a browser and access the Web UI via <http://myrouter> or <http://192.168.128.1> .
  - ❖ The Web UI launches and displays the main window.

## Home

Check current status of network connection and data usage on the Home page.

- From the Web UI, click the Home tab. (For connection information, see [Web UI Overview](#).)

The screenshot displays the Franklin Wireless C801 Web UI Home page. At the top, there is a header with the Franklin Wireless logo, the text 'Welcome to your C801', a language dropdown menu set to 'English', and a 'Log in' link. Below the header is a navigation bar with four tabs: 'Home' (selected), 'Settings', 'About', and 'Support'. The main content area is divided into two columns. The left column contains two sections: 'WAN' and 'LTE'. The 'WAN' section shows fields for 'Link' (with a grey dot), 'Connected Time', 'Response Time(ping)' (with a dash), and 'WAN IP'. The 'LTE' section shows fields for 'Link' (with 'Disconnected'), 'Network', 'Signal' (with a signal strength icon), 'Connected Time', and 'Data Used' (with '0 Byte'). A 'Connect' button is located at the bottom of the LTE section. The right column contains a 'Network status' section with fields for 'Status' (with 'Not Active'), 'Current WAN Interface' (with '-'), and 'WAN Preference' (with 'Ethernet + LTE').

## Admin Log in

Accessing other menus from the home screen requires admin log in.

1. Click "Log in" on the upper right corner of the main screen to log in. (clicking other menu on the main screen will prompt the log in page as well.)

Enter Your Password

Password

Login Cancel

*If too many incorrect passwords are tried, access will be suspended.*

2. Enter the password and click "Login".

**Note:** The default password is "password." It's recommended to change the password for your security.

## Settings Tab

Set your device options, including **Router**, **Mobile Network** and **Device**.

### Router

#### Connection Settings

Set the Connection Settings for your device.

1. From the Web UI, click **Settings>Router>Connection Settings** to display the manage connection preference parameters.

The screenshot shows the 'Connection Settings' page in the Web UI. The top navigation bar includes 'Home', 'Settings', 'About', and 'Support'. A left sidebar menu is open, showing 'Router' selected, with 'Connection Settings' highlighted. The main content area is titled 'Connection Settings' and contains the following settings:

- WAN Preference:** A dropdown menu with 'Ethernet + LTE Backup' selected.
- Ping Interval (seconds):** A text input field with the value '5'.
- Ping Retry Count:** A text input field with the value '5'.
- Response Host:** Radio buttons for 'Default' (selected) and 'User Set'.

A 'Save Changes' button is located at the bottom right of the settings area.

- **WAN Preference:** Select the preference for your wide access network connection.



- **Ethernet + LTE Backup:** This setting will prioritize Ethernet connection as the main source of internet and failover to LTE when connection is lost. (Once the Ethernet connection is restored, the C801 will failback to Ethernet connection.)
- **Ethernet Only:** This setting will only allow Ethernet connection as the primary source of internet.
- **LTE Only:** This setting will only allow LTE as the primary source of internet.

Note: Items below only apply when **WAN Preference** is set to **Ethernet + LTE Backup** mode.

Depending on the settings below, ping packet is sent to the response host address through Ethernet interface.

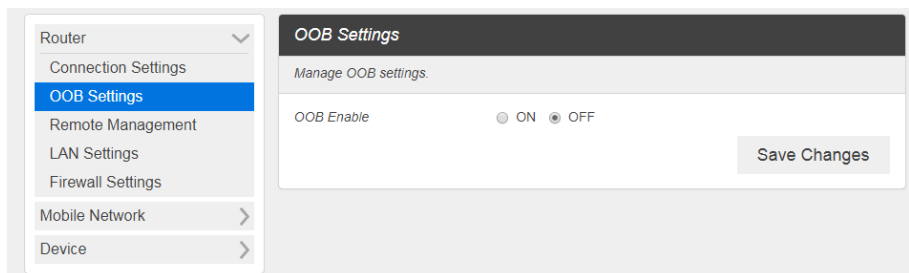
If ping is successful, connection will be made via ethernet. If not, device will failover to LTE connection.

- **Ping Interval (seconds) :** Set how often the device is to ping in seconds.
- **Ping Retry Count:** Set the number of times the device should ping.
- **Response Host:** Set the host address.
  - Default: Ping is sent and received at the default host address
  - User Set: Set the desired host name / IP address

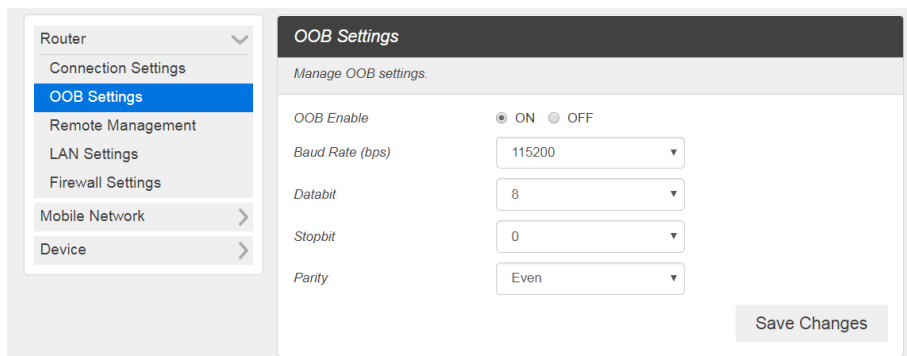
2. Click Save Changes to save your settings.

## OOB Settings

1. From the Web UI, click **Settings> Router>OOB Settings** to display the device information shown in the following figure.



2. If ON is selected for OOB Setting, an extra menu will appear like below.



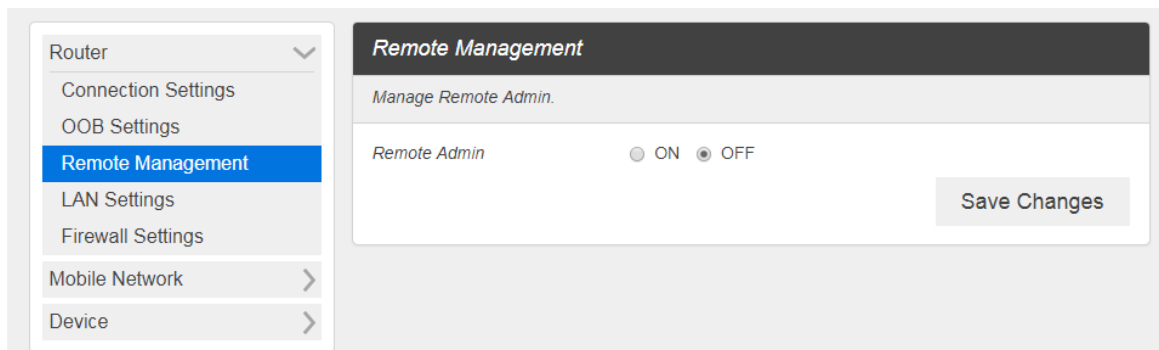
Please configure the C801 Out of Band settings to match your router configuration. Your router should have the following information below.

- **Baud Rate(bps)** : Input and output baud rate
- **Databit** : Character size mask
- **Stopbit** : stop bits. If enable, send two stop bits, else one.
- **Parity** : parity bit. Odd or even.

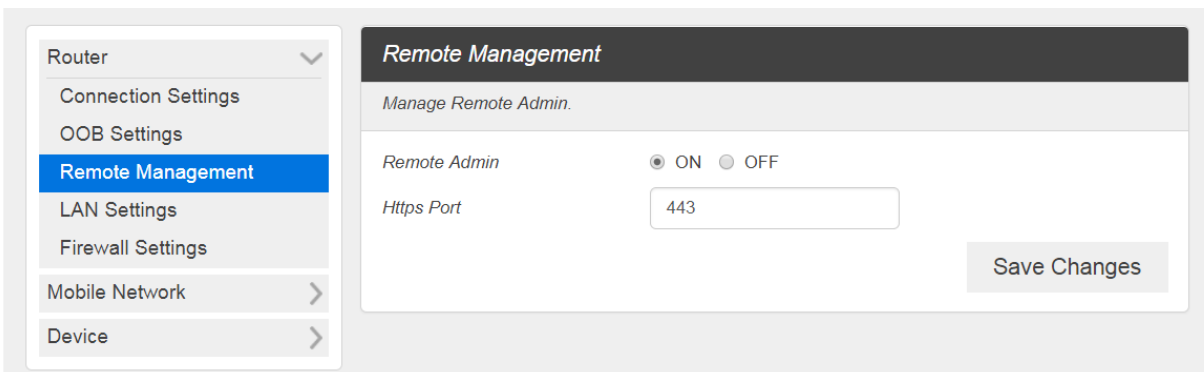
3. Click Save Changes to save your settings.

### Remote Management

1. From the Web UI, click **Settings> Router>Remote Management** to display the device information shown in the following figure.



If ON is selected for Remote Management, user will be able to access the C801's webpage remotely via HTTPS. The standard port is 443.



2. Click Save Changes to save your settings.

## LAN Settings

1. From the Web UI, click **Settings> Router>LAN Settings** to display the information shown in the following figure.

The screenshot shows the LAN Settings configuration page. On the left, a navigation menu is visible with 'LAN Settings' highlighted. The main panel is titled 'LAN Settings' and includes the subtitle 'Manage your mobile broadband data connection'. The configuration fields are as follows:

|                 |   |                           |
|-----------------|---|---------------------------|
| IP Address      | 192.168.128.1   | Network Access Identifier |
| Subnet Mask     | 255.255.255.0   |                           |
| DHCP Server     | <input checked="" type="radio"/> ON <input type="radio"/> OFF |                           |
| DHCP IP Range   | 192.168.10 ~ 192.168.100                                      |                           |
| DHCP Lease Time | 86400   |                           |
| DNS Manual Mode | <input type="radio"/> ON <input checked="" type="radio"/> OFF |                           |
| NAT Timeout     | 300   |                           |

A 'Save Changes' button is located at the bottom right of the configuration area.

- 1) **IP Address:** IP address for Web User Interface.
  - 2) **Subnet Mask:** Subnet mask for the IP address.
  - 3) **DHCP Server:** Enable or disable DHCP Server function.
  - 4) **DHCP IP Range:** Allocate begin and end IP address for IP Range.
  - 5) **DHCP Lease Time:** Define how long the leased IP address will be in use before expiration. The new IP address will be assigned.
  - 6) **DNS manual mode:** Turn DNS manual mode on or off.
  - 7) **NAT Timer:** Set TCP NAT time.
2. Click Save Changes **to save your settings.**

## Firewall Settings

1. From the Web UI, click **Settings>Router>Firewall Settings**. The Settings page is shown in the following figure.

The screenshot shows the Firewall Settings configuration page. On the left, a navigation menu is visible with 'Firewall Settings' highlighted. The main panel is titled 'Firewall' and includes the subtitle 'IP address filter function and WAN port ping reply function are only available when firewall is enabled.' The configuration fields are as follows:

|                 |   |
|-----------------|---|
| Firewall Switch | <input type="radio"/> ON <input checked="" type="radio"/> OFF |
|-----------------|---|

A 'Save Changes' button is located at the bottom right of the configuration area.

2. If ON is selected for Remote Management, an extra menu will appear like below.

#### IP Address Filtering

IP Address Filtering  ON  OFF

Filter packets using the following rules when specified with protocol, port and IP address.

- LAN/WAN port: The Value range is 1 ~ 65535.

- Settings not enabled until applied.

| Name    | WAN IP Address | WAN Port | Protocol | Status | Options |
|---------|----------------|----------|----------|--------|---------|
| No Item |                |          |          |        |         |

Add

#### Portmapping

Portmapping  ON  OFF

Portmapping enables computers to access WWW, FTP or other services provided by the LAN

- IP Address: Specify LAN address. Packets which match the specified conditions will be forwarded to this address.

- LAN/WAN port: Port of the computer providing services. It is a single port with value range of 1 ~ 65535.

- Protocol: Protocols applied by services.

- Settings not enabled until applied.

| Name    | WAN Port | LAN IP Address | LAN Port | Protocol | Status | Options |
|---------|----------|----------------|----------|----------|--------|---------|
| No Item |          |                |          |          |        |         |

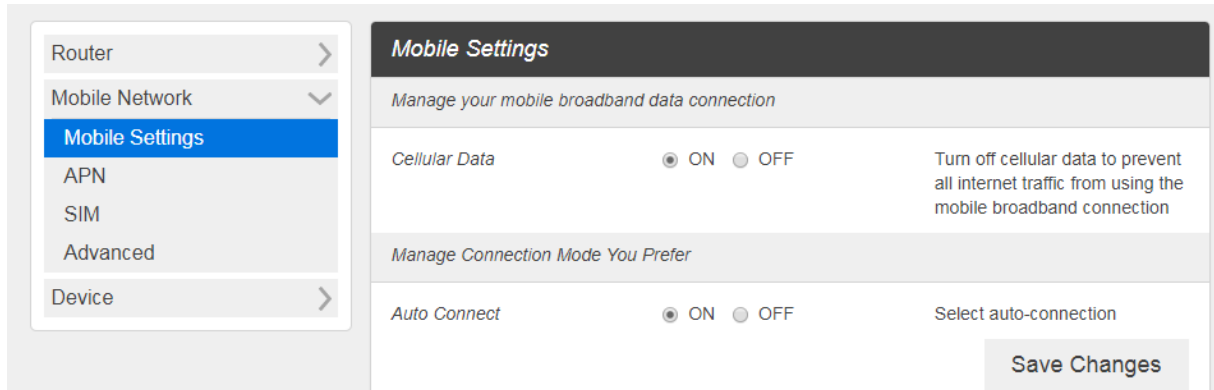
Add

## Mobile Network

**!** Mobile Network Settings should only be used as directed by Customer Service personnel.

### Mobile Settings

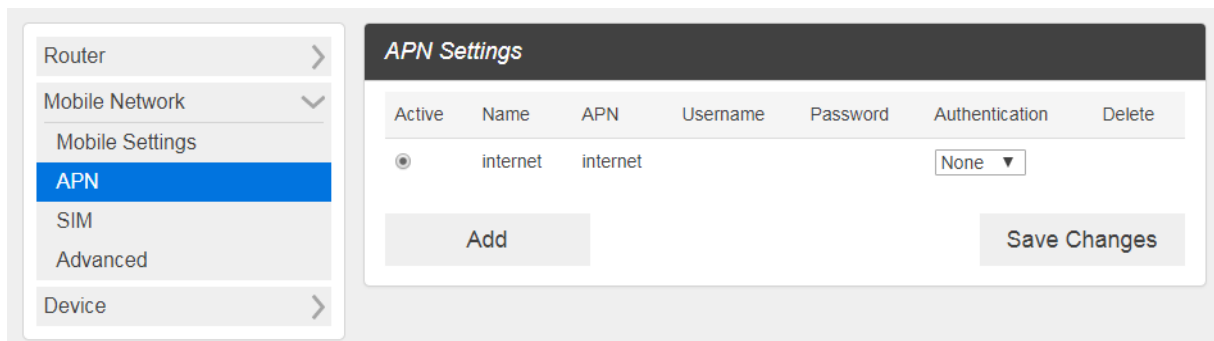
1. From the Web UI, click **Settings>Mobile Network>Mobile Settings**. The Mobile Settings page is shown in the following figure.



2. **Cellular data:** Turn Cellular data on or off. Turn it off to prevent all Internet traffic from using the mobile broadband connection.
3. **Auto Connect:** Turn the device on or off to automatically connect to the network.
4. Click **Save Changes** to save your settings.

### APN

1. From the Web UI, **click Settings>Mobile Network>APN**. The default APN parameters are shown in the following figure. You can use the default APN to connect to the Internet. You can also add new APNs.



- To add a new APN, follow the steps below:
  - 1) Click **Add** to access the following page.

**APN Settings**

| Active                           | Name                 | APN                  | Username             | Password             | Authentication | Delete       |
|----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------|--------------|
| <input checked="" type="radio"/> | internet             | internet             |                      |                      | None ▼         |              |
| <input type="radio"/>            | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | None ▼         | OK<br>Cancel |

2) Enter the related parameters as described in the following table.

| Parameters            | Description  |
|-----------------------|--|
| <b>Name</b>           | Type the profile name.   |
| <b>APN</b>            | Type the APN string.   |
| <b>User name</b>      | User name is used to obtain authentication from the ISP when the connection is established.  |
| <b>Password</b>       | Password is used to obtain authentication from the ISP when the connection is established.   |
| <b>Authentication</b> | Password Authentication Protocol (PAP) provides a simple method without encryption for the peer to establish its identity using a 2-way handshake. Challenge-Handshake Authentication Protocol (CHAP) is used to periodically verify the identity of the peer using a 3-way handshake. |

3) Click **Save** to add the new APN.

**Note:** The default APN cannot be edited or deleted.

## SIM

1. From the Web UI, click **Settings>Mobile Network>SIM**. The SIM PIN lock is disabled by default. You can enable it by entering SIM PIN.

- Router >
- Mobile Network >
- Mobile Settings
- APN
- SIM
- Advanced
- Device >

**SIM**

The SIM card inside your device can be locked using a PIN. If the SIM card is locked you must enter the PIN below before you are able to connect to the internet.

SIM Status: No SIM

Desired Action:

Enter Current PIN:

0 attempts remain until your sim is PUK locked.

**Entering an incorrect PIN too many times will PUK lock your SIM and you will be unable to use this device. You will need to contact your service provider to unlock the SIM.**

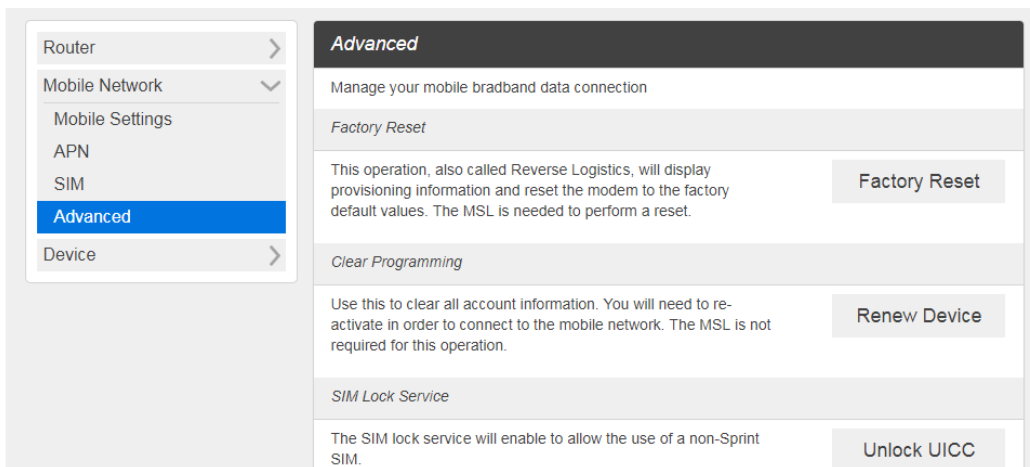
- Enter the SIM PIN and press “**Save Changes**”. The SIM Status will be changed to Enabled. Once the SIM PIN Lock is enabled, you need to enter the SIM PIN to connect to the mobile broadband network each time you power on your C801.

Note: If you enter the wrong SIM PIN three times, your SIM will be disabled permanently until you enter the PUK code from your service provider. Please contact your Service Provider.

## Advanced

- **Caution** Advanced Mobile Network Settings should only be used as directed by Customer Service personnel. Certain advanced options will reset your device's connections and programming and will require reactivation.

1. From the Web UI, click **Settings>Mobile Network>Advanced** to set the mobile network advanced settings.



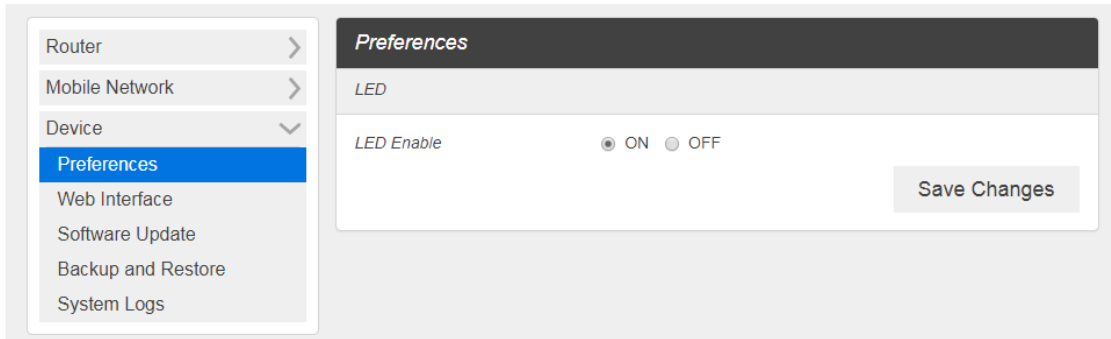
- **Factory Reset:** Click **Factory Reset** to reset the C801 to factory default value.
- **Clear Programming:** Click **Renew Device** to clear all account information.
- **SIM Lock Service:** Click **Unlock UICC** to allow the use of SIM from various service providers.

## Device

- ! *The Device settings menu lets you set display brightness, manage account password, update software, back up, restore and check system logs*

### Preferences

1. From the Web UI, click **Settings>Device>Preferences**. You can set the display timeout on this page.

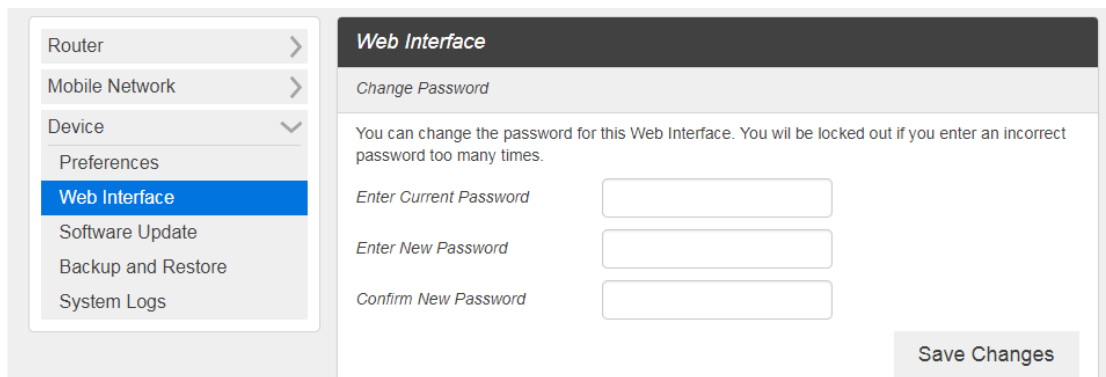


- **LED Enable:** If ON is selected, the LED indicator next to Your C801 display will blink when the device is on. This LED is a power indicator that shows the device is on when the device display is off.

2. Click **Save Changes** to save your settings.

### Web Interface

1. From the Web UI, click **Settings>Device>Web Interface**. You can manage your Web UI admin password on this page.



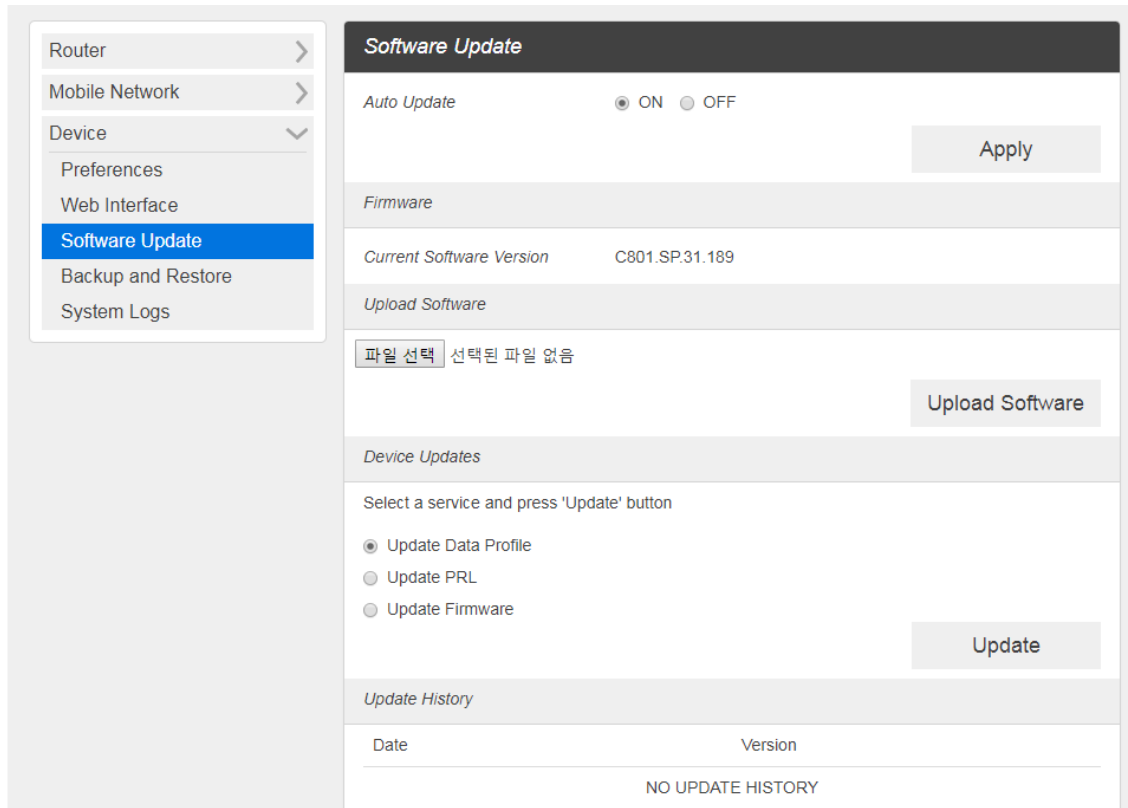
- **Change Password:** Allows changing password of Web UI Log in.

2. Click **Save Changes** to save your settings.



## Software Update

1. From the Web UI, click **Settings>Device>Software Update**. You can update the software on this page.

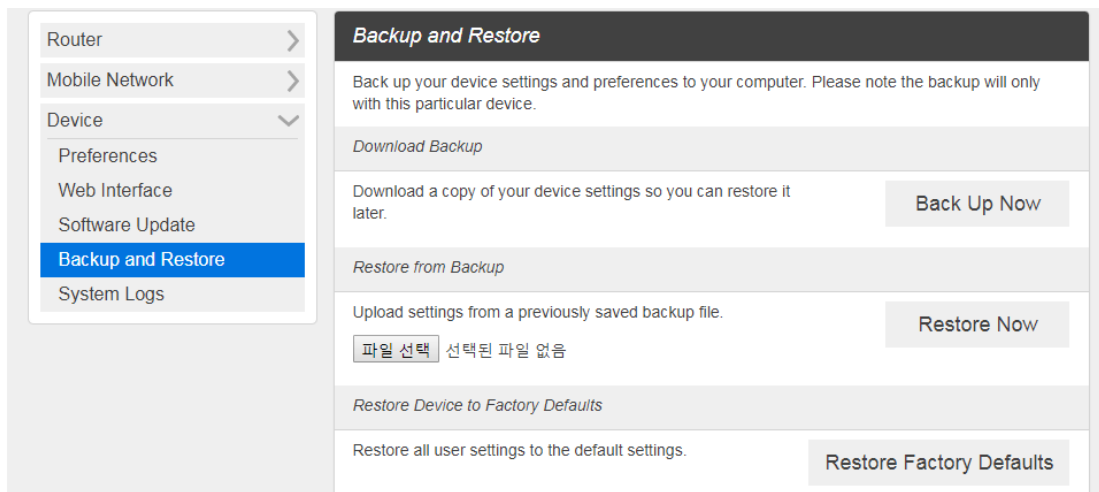


Read the onscreen options and click the update you would like to initiate.

- **Auto Update:** If ON is selected, your C801 will check the latest software periodically and update if new software is available.
- **Update Software:** If you have a new software file provided by your service provider, you can select the file and update your C801 manually by pressing Update Software button.
- **Device Updates:** If you would like to check for new data profile, PRL, or Firmware, select desired option and press the Update button. Your C801 will check for the latest version. If available, the device will proceed to update.
- **Update History:** Displays the update history list.

## Backup and Restore

1. From the Web UI, click **Settings>Device>Backup and Restore** to back up your device settings to your computer, restore settings from backup file, or restore your device to its factory default settings.



### ■ Backup Now

To back up your device settings to your computer, follow the steps below:

- 1) Click **Back Up Now**.
- 2) Click **Save** on the pop-up window.
- 3) Choose a location on your computer to save the backup file.
- 4) Click **Save**.

### ■ Restore Now

To restore from backup file, follow the steps below:

- 1) Click **Select File** to select the backup file in your computer.
- 2) Click **Restore now**.

### ■ Restore to Factory Defaults

To restore your device to its factory default settings, follow the steps below:

- 1) Click **Restore factory defaults**.
- 2) Click **Yes** to confirm the command.

## System Logs

1. From the Web UI, click **Settings>Device>System logs**, and then click **Download logs** to download the system logs displayed

**System Logs**

Enable Logs  ON  OFF Save Changes

```
[2013/06/20 14:00:08] info: Mobile Hostpot started.  
[2013/06/20 14:00:09] info: LTE F/W Inserted  
[2013/06/20 14:00:09] info: update_uicc_state: -1, 0  
[2013/06/20 14:00:09] info: UICC Deactivated  
[2013/06/20 14:00:10] info: LTE F/W Online  
[2013/06/20 14:00:11] info: Load configuration...  
[2013/06/20 14:00:11] info: WAN prefer mode : eth+lte  
[2013/06/20 14:00:11] info: Ping Address : 8.8.8.8  
[2013/06/20 14:00:11] info: Ping Interval : 10  
[2013/06/20 14:00:11] info: Ping Retry count : 5  
[2013/06/20 14:00:11] info: wan_state = link-down  
[2013/06/20 14:00:11] info: lan_state = link-down  
[2013/06/20 14:00:11] info: Lifetime Transferred 81918  
[2013/06/20 14:01:12] info: Network State : Searching Time Out
```

Refresh Clear Logs Download Logs

Note: System logs are used for engineering purposes by your service provider. Keep it OFF during regular usage of your device.

## About

Displays your device's connection information, firmware information, WWAN information, Wi-Fi details and device information.

1. From the Web UI main screen, Click the **About** tab to view the available information.

Home Settings About Support

| Account   |                  |
|-----------|------------------|
| My Number |                  |
| MSID      |                  |
| MEID      | 0000000000000000 |
| ICCID     |                  |
| IMSI      |                  |
| IMEI      | 0000000000000000 |

| Device            |                 |
|-------------------|-----------------|
| Model             | Franklin C801   |
| Manager           | http://myrouter |
| Hardware Revision | P1              |

| Firmware           |                |
|--------------------|----------------|
| Firmware Version   | 0.3.1.7        |
| Build Date         | Dec 15 2017    |
| Web App Version    | C801.SP.31.189 |
| Bootloader Version | 0.54.76        |

| WWAN Info            |          |
|----------------------|----------|
| Activation Date      |          |
| Refurbished          | No       |
| IP Address           |          |
| LTE APN NI           |          |
| Lifetime Transferred | 80.00 KB |

Save to File

Debug Info

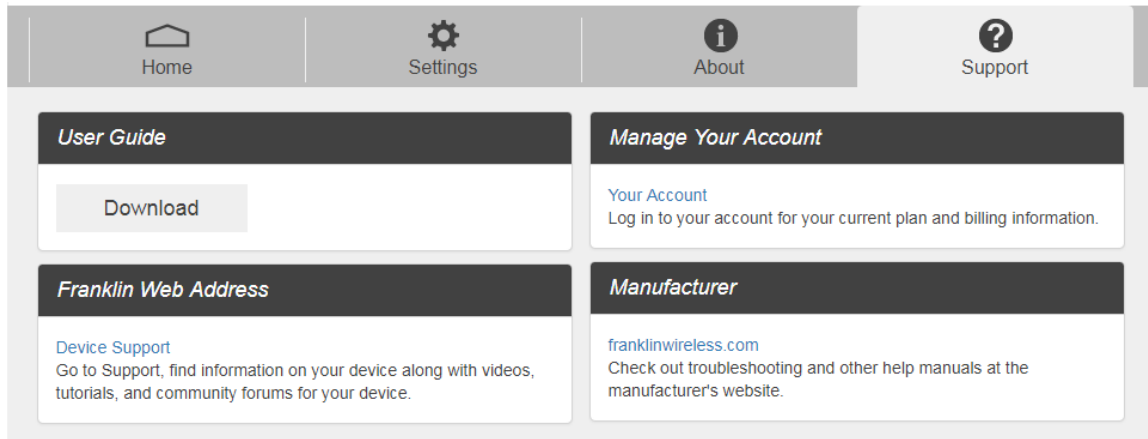
View detailed diagnostic information about your device.

Debug

## Support Tab

Obtain support information on this interface.

1. From the Web UI main screen, click the **Support** tab to view the available options.



# Appendix

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The following topics cover items such as troubleshooting, device specifications, applicable warranty and service information, customer service contacts, and applicable trademark and copyright notices.

## Troubleshooting

Check below for troubleshooting solutions for common device issues.

### Issue: Internet connection fails.

- **Solution 1:** Make sure that you are within the service area.
- **Solution 2:** If signal reception is poor, move to where signal reception is good and then reconnect. **Solution 3:** The access point might be busy depending on the time of day. Wait a little and then reconnect.
- **Solution 4:** Activate the Web UI and make sure that network settings are correct

### Issue: Transmission fails quickly.

- **Solution 1:** Make sure that the broadband device is properly connected to the PC or other device.
- **Solution 2:** Signal reception might be poor. Check transmission where signal reception is good.
- **Solution 3:** Restart the broadband device.
- **Solution 4:** Check the broadband device battery level. If battery level is low, charge with AC charger. See Charge the Battery for how to charge.

### Issue: Transmissions are slow.

**Solution 1:** Signal reception might be poor. Check transmission where signal reception is good.

**Solution 2:** Connection might be poor. Try again after a while.

### Issue: Forgot PIN / Unknown PIN Unblocking Key (PUK) / SIM card is locked.

**Solution:** Contact Service Provider.

### Issue: SIM card is not recognized.

**Solution 1:** Check whether the SIM card is properly installed. For details, see Insert or Remove a SIM Card.

**Solution 2:** Check the SIM card for damage.

**Solution 3:** Check the SIM card IC chip for scratches/corrosion.

**Solution 4:** Dirty SIM card (particularly IC chip) may prevent recognition. Clean gently with a soft cloth.

**Solution 5:** Contact Customer Service.

**Issue: How do I return the broadband device to the default settings (reset)?**

**Solution 1:** Use the reset button located on the back of the device after battery cover removal. (Device must be On when pressing reset button.)

**Solution 2:** Use the Web UI to reset the device. For details, see Web UI Window.

**Issue: An old phone number appears on the Web UI.**

**Solution:** The Web UI may display an old phone number depending on subscription terms or cancellation method.

**Issue: The broadband device operation is unstable.**

**Solution 1:** Avoid extremely high/low temperatures, high humidity, direct sunlight, dusty areas, etc. Read "Safety Precautions" for use in a proper environment.

**Solution 2:** Avoid invalid software. Operation is unguaranteed for Internet connection, etc., using other-party software.

**Issue: The connection suddenly failed.**

**Solution 1:** The connection method may have been changed. Check connection mode on the broadband device display.

**Solution 2:** Restart the broadband device.

## Specifications

The following tables list the specifications for the broadband device, the AC charger, and the materials.

### Broadband Device Specifications

| Item              | Description                                       |
|-------------------|---|
| Model name        | C801 4G Router                                    |
| Dimensions        | 104mm (L) x 104mm (W) x 49mm (H)                  |
| Weight            | 178g  |
| Interface         | Web UI  |
| Power consumption | Normal state: 1.75 Watts<br>Max state : 3.5 Watts |
| Operating system  | Linux OS  |

| Item                | Description  |
|---------------------|--|
| Frequency           | LTE B25<br>DL: 1930 ~ 1995 MHz    UL:1850 ~ 1915 MHz<br>LTE B26<br>DL: 859 ~ 894 MHz      UL: 814 ~ 849 MHz<br>LTE B41<br>DL: 2496 ~ 2690 MHz    UL: 2496 ~ 2690 MHz |
| Compatible networks | LTE category 4   |
| Communication speed | LTE category 4<br>DL : 150Mbps<br>UP : 50Mbps  |

### AC Charger Specifications

| Item                      | Description     |
|---------------------------|-----------------|
| Rated input voltage       | 100-240Vac      |
| Operating range           | 90-264Vac       |
| Rated input frequency     | 50/60Hz +/- 3Hz |
| Nominal dc output voltage | +5.0V (±5%)     |
| Rating load current       | 2.0A            |

### Materials Specifications

| Parts        | Materials/Finishing   |
|--------------|-----------------------|
| A cover      | PC(White), Silk print |
| B cover      | PC(Black), Silk print |
| A cover DECO | PC(Black)             |
| Rubber feet  | Silicon(Black)        |



## **Warranty and Service**

The following topics outline your device's warranty and service information.

### **Warranty**

Your device purchase includes Warranty.

- Confirm shop name and purchase date.
- Read contents of Warranty and keep it in a safe place.
- Check warranty period in the Warranty.

### **Services**

Before submitting your device for repairs, contact Service Provider's Customer Service or General Information; be prepared to describe the problem in detail.

- During the warranty period, repairs will be made under the terms and conditions described in the Warranty.
- After the warranty period, repairs will be upon request; if said repairs can be made, you will be charged for them.

### **Customer Service**

For broadband device or service information, call general information. For repairs, call your Service Provider's customer assistance.

### **Trademarks and Copyright Information**

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# Safety and Notices

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The following topics address important safety precautions, general notes, and required RF exposure information for your broadband device.

## **Safety Precautions**

The following topics outline important safety precautions that must be observed when using your device.

### **Important Notice**

Due to the nature of wireless communications, transmission and reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or be totally lost. Although significant delays or losses of data are rare when wireless devices are used in a normal manner with a well-constructed network, your device should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Franklin Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using your device, or for failure of your device to transmit or receive such data.

### **Safety and Hazards**

Do not operate your device under the following conditions.

- In areas where blasting is in progress
- Where explosive atmospheres may be present
- Near medical equipment
- Near life support equipment, or any equipment that may be susceptible to any form of radio interference.

In such areas, your device **MUST BE POWERED OFF**. Your device can transmit signals that could interfere with this equipment.

Do not operate your device in any aircraft, whether the aircraft is on the ground or in flight. In aircraft, your device **MUST BE POWERED OFF**. When operating, your device can transmit signals that could interfere with various onboard systems.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground. Your device may be used at this time if allowed by airlines.

The driver or operator of any vehicle should not operate the device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some jurisdictions, operating such communications devices while in control of a vehicle is an offense.

## FCC Compliance

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

## RF Exposure Statement

The antenna(s) must be installed such that a minimum separation distance of at least 20 cm is maintained between the radiator (antenna) and all persons at all times. This device must not be co-located or operating in conjunction with any other antenna or transmitter.

